

APPARATUS FOR CROSSTALK COMPENSATION IN
A TELECOMMUNICATIONS CONNECTOR
BRIAN CELELLA ET AL
Attorney Docket No. SIE-0157
Cantor Colburn LLP, 55 Griffin Road South, Bloomfield, CT 06002

Case #	Pair combination	Limit	NEXT loss magnitude limit ^{1),4),5)}	NEXT loss phase limit ^{2),3)}
Case 1	3,6-4,5	Low	$\leq 36.4 - 20\log(f/100)$	$(-90 + 1.5 \cdot f/100) \pm f/100$
Case 2	3,6-4,5	Central	$(37.0 \pm 0.2) - 20\log(f/100)$	$(-90 + 1.5 \cdot f/100) \pm f/100$
Case 3	3,6-4,5	High	$\geq 37.6 - 20\log(f/100)$	$(-90 + 1.5 \cdot f/100) \pm f/100$
Case 4	1,2-3,6	Low	$\leq 46.5 - 20\log(f/100)$	$(-90 + 1.5 \cdot f/100) \pm 3f/100$
Case 5	1,2-3,6	High	$\geq 49.5 - 20\log(f/100)$	$(-90 + 1.5 \cdot f/100) \pm 3f/100$
Case 6	3,6-7,8	Low	$\leq 46.5 - 20\log(f/100)$	$(-90 + 1.5 \cdot f/100) \pm 3f/100$
Case 7	3,6-7,8	High	$\geq 49.5 - 20\log(f/100)$	$(-90 + 1.5 \cdot f/100) \pm 3f/100$
Case 8	1,2-4,5	Low	$\leq 57 - 20\log(f/100)$	$90 \pm (30 \cdot f/100)$
Case 9	1,2-4,5	High	$\geq 70 - 20\log(f/100)$	any phase
Case 10	4,5-7,8	Low	$\leq 57 - 20\log(f/100)$	$90 \pm (30 \cdot f/100)$
Case 11	4,5-7,8	High	$\geq 70 - 20\log(f/100)$	any phase
Case 12	1,2-7,8	Low	$\leq 60 - 20\log(f/100)$	any phase

1) Magnitude limits apply over the frequency range from 10 MHz to 250 MHz.
2) Phase limits apply over the frequency range from 50 MHz to 250 MHz.
3) When the measured plug NEXT loss is greater than 70 dB, the phase limit does not apply.
4) When a low limit NEXT loss calculation results in values greater than 70 dB, there shall be no low limit for NEXT loss.
5) When a high limit NEXT loss calculation results in values greater than 70 dB, the high limit NEXT shall revert to a limit of 70 dB.

FIG. 1

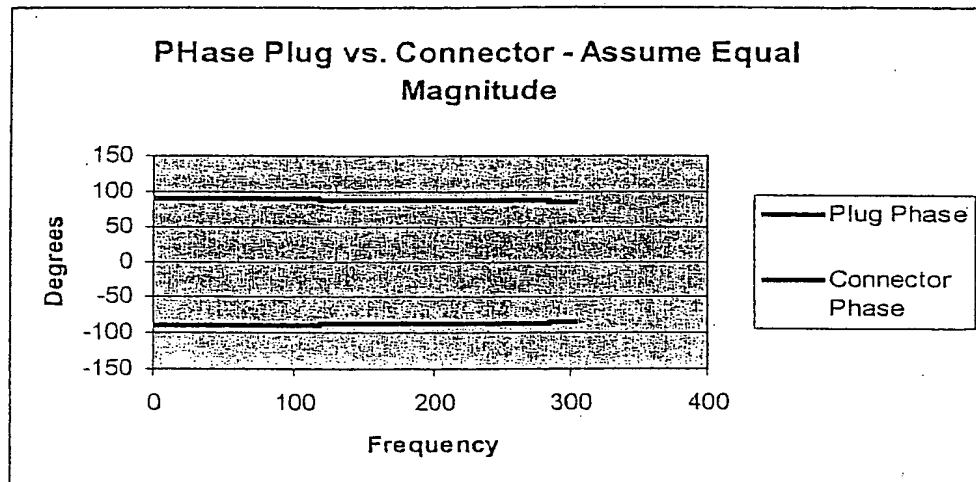


FIG. 2

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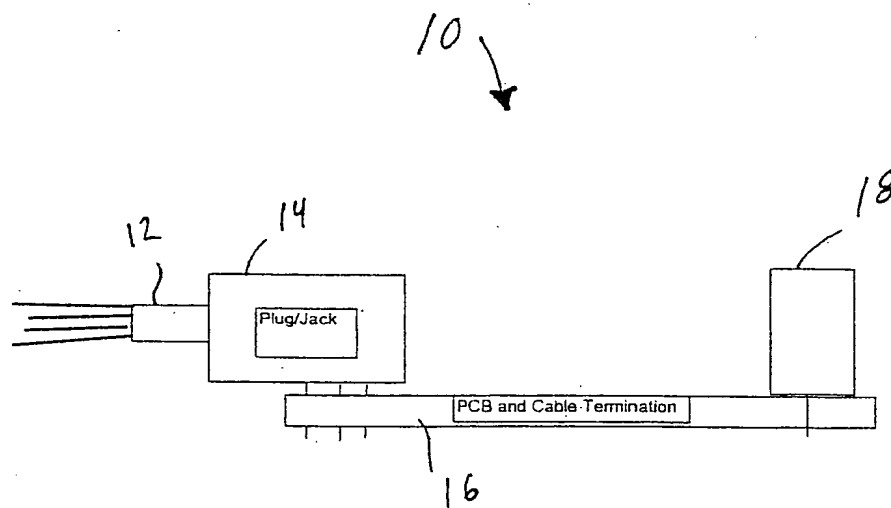


FIG. 3

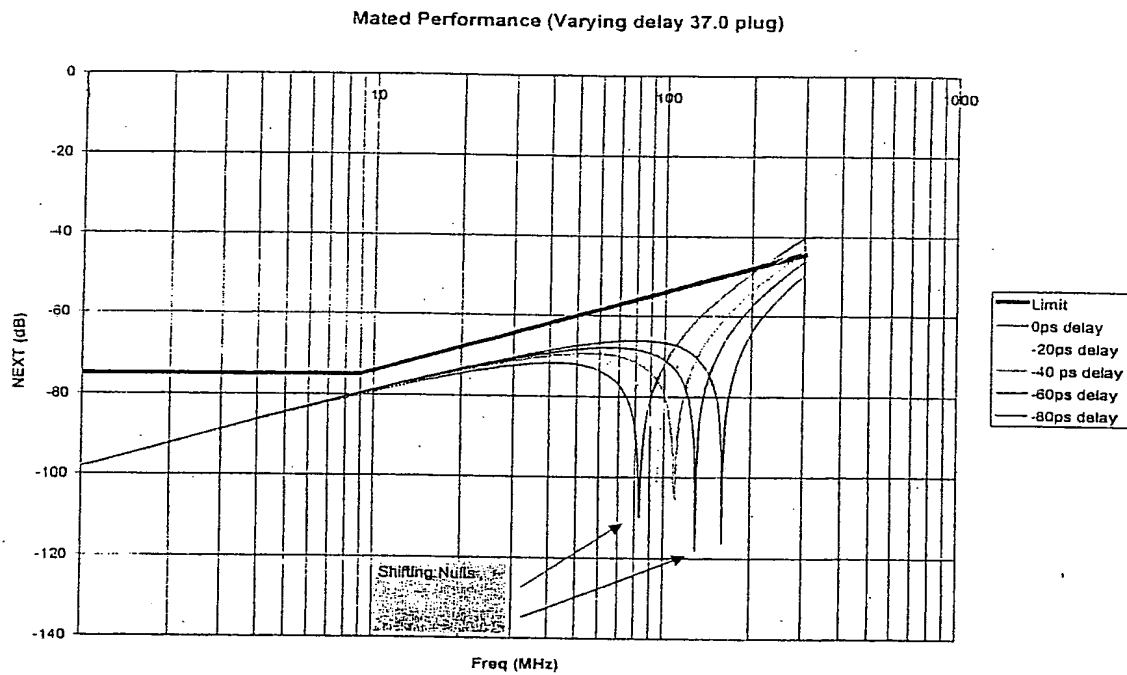


FIG. 4

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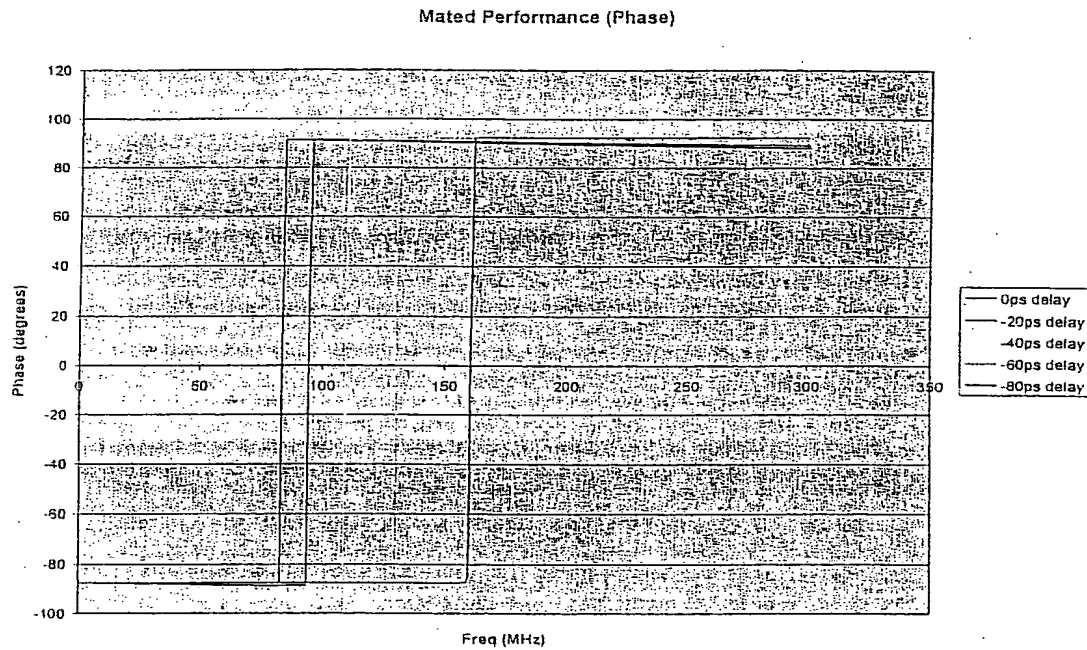
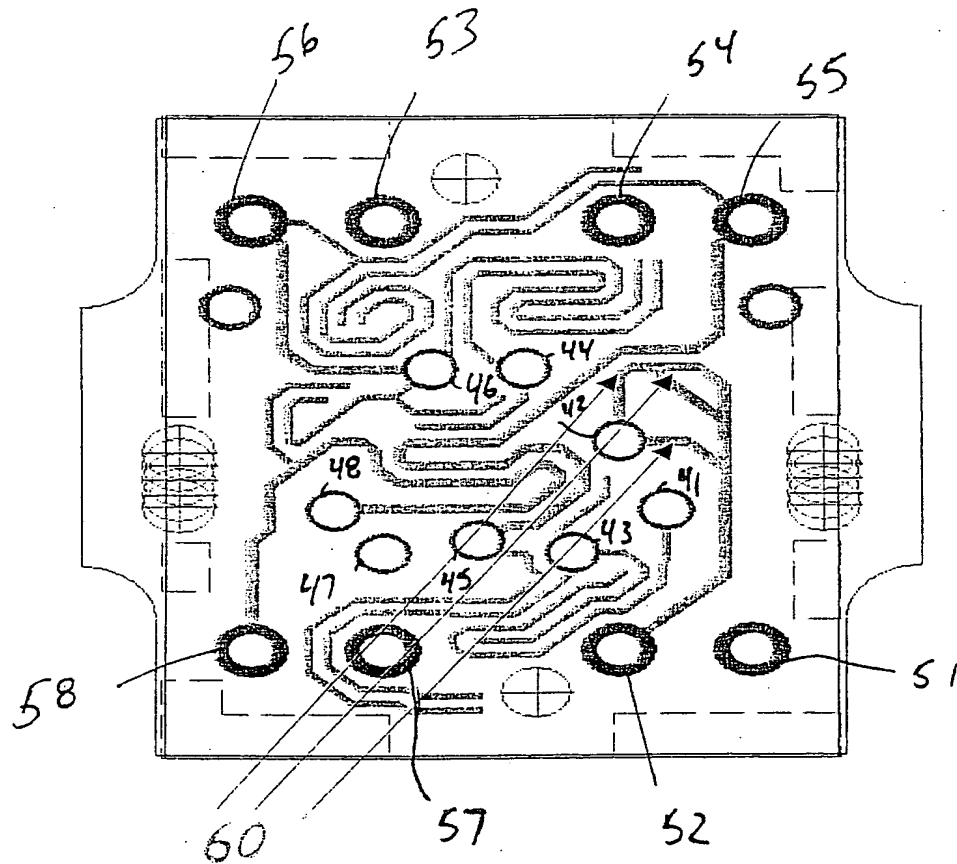


FIG. 5

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FIG. 6

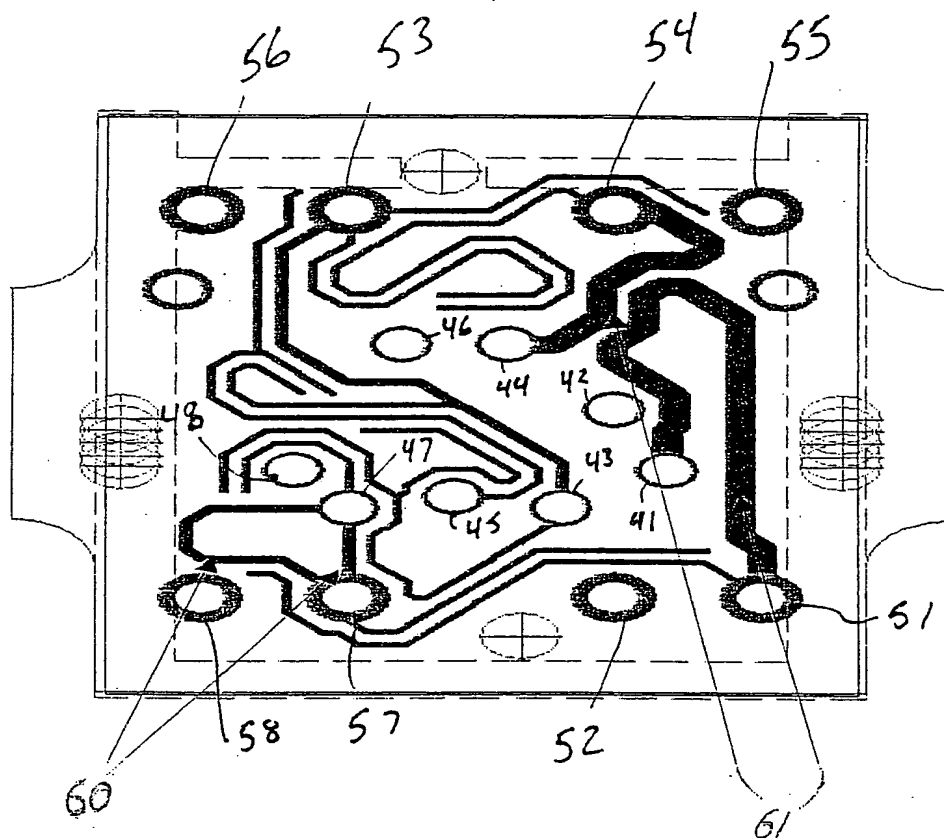


FIG. 7

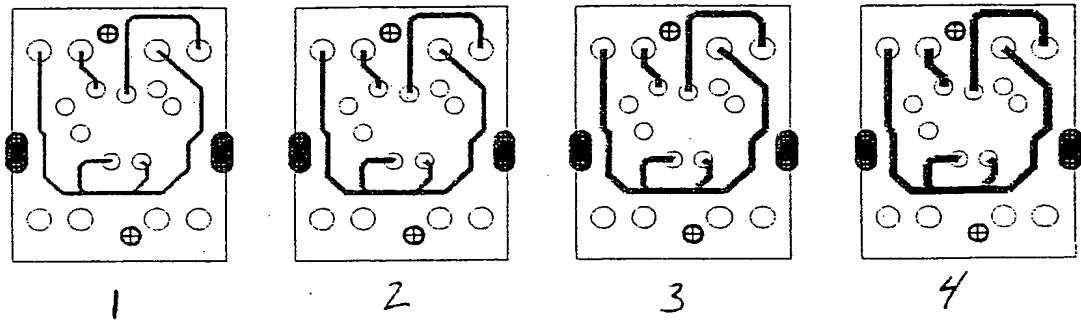


FIG. 8

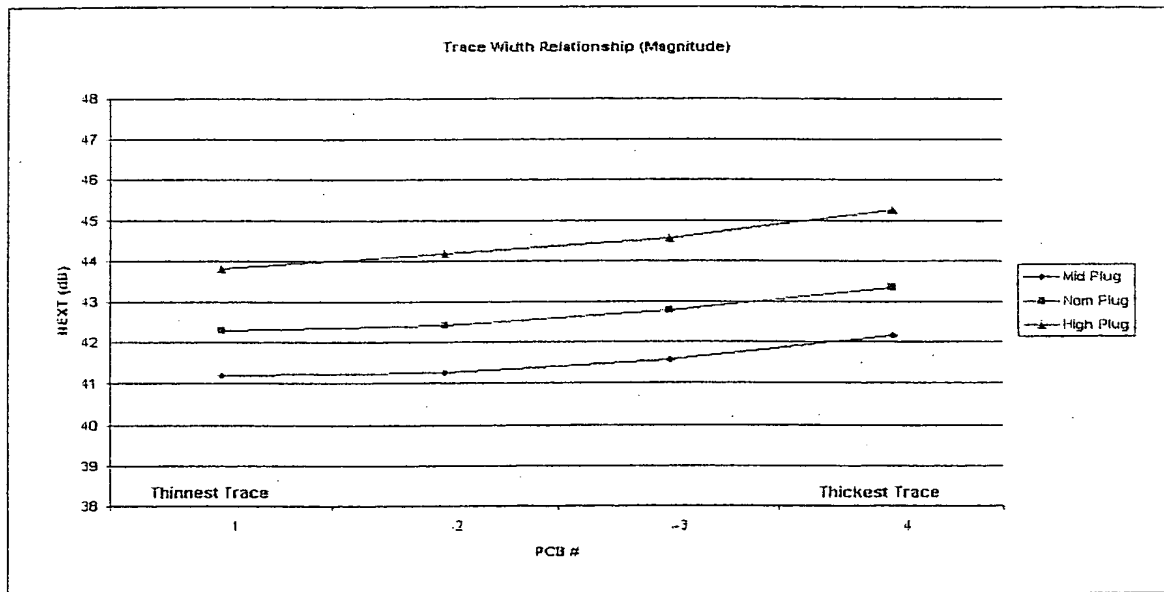


FIG. 9

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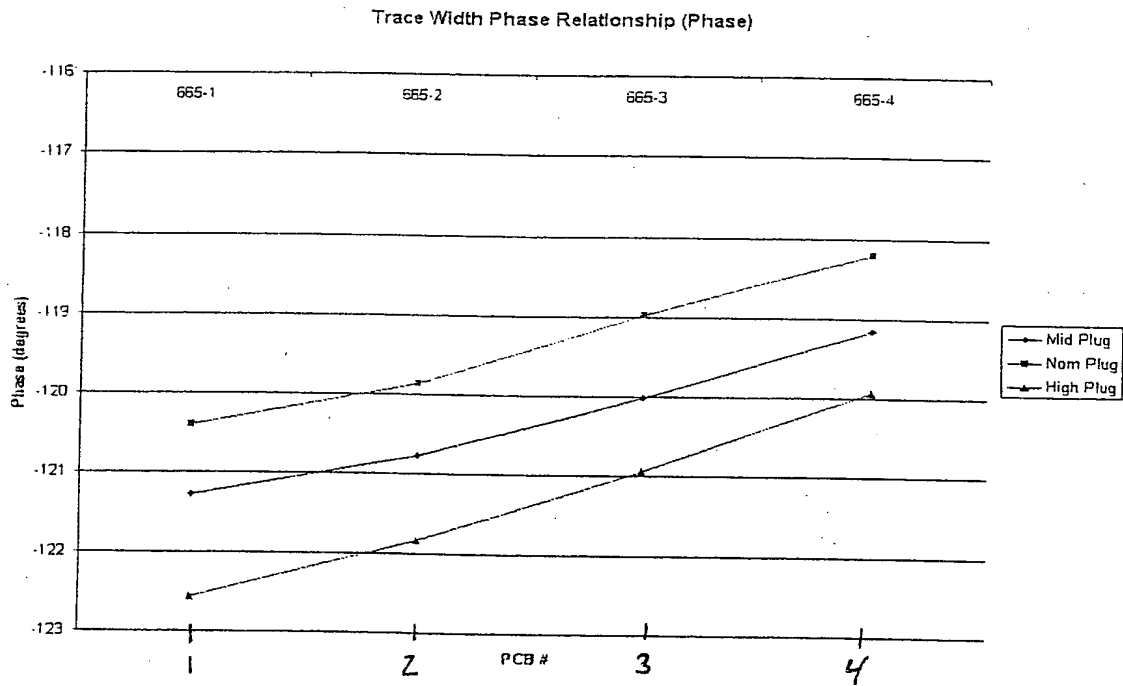
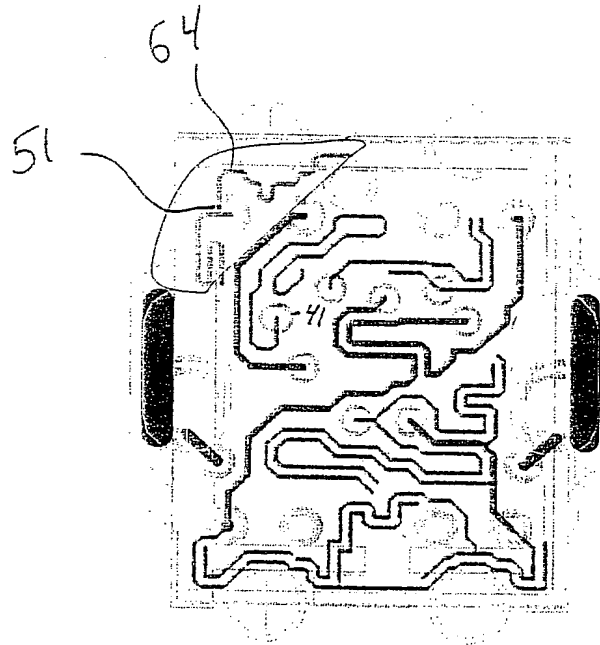
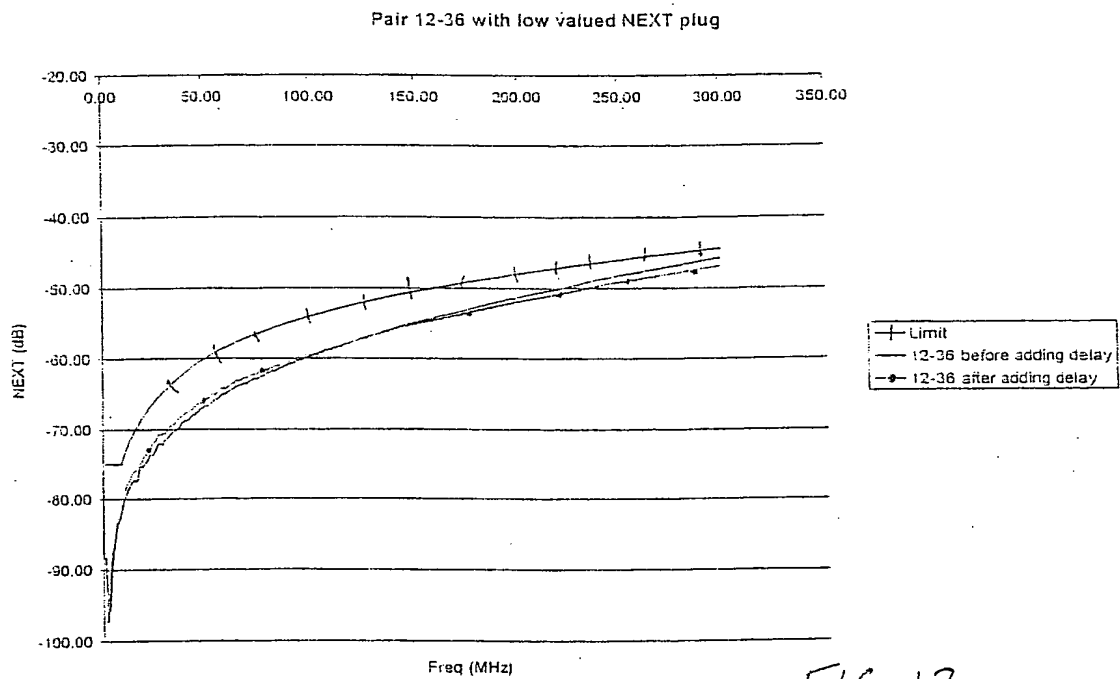


FIG. 10



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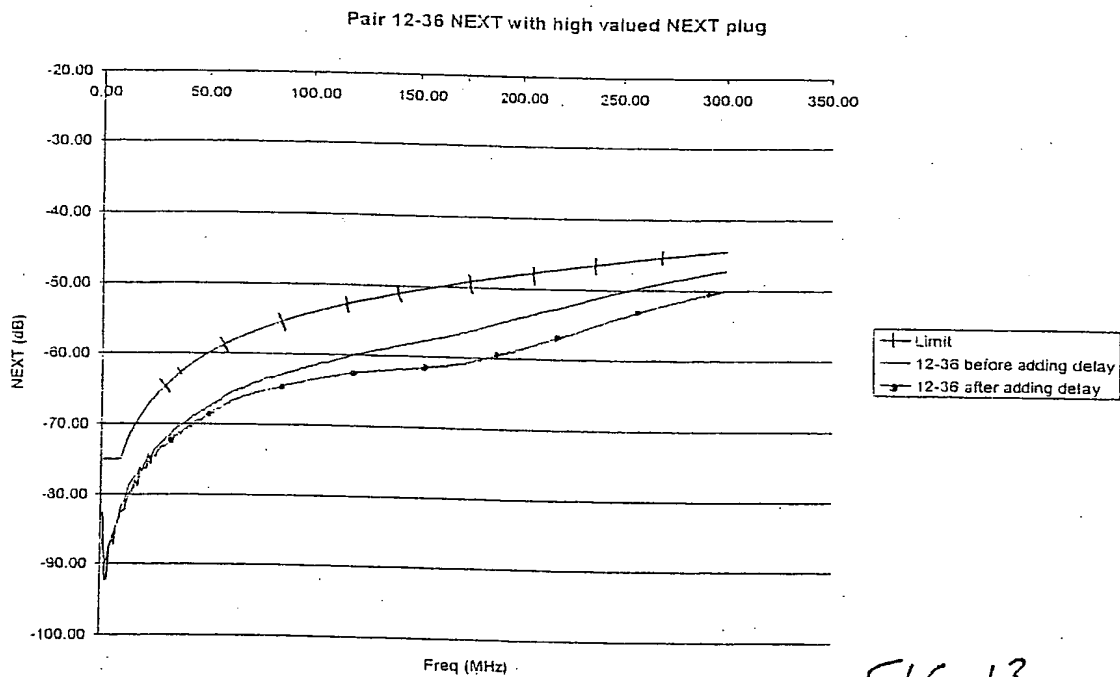


FIG. 13